

09/693,510 (UP03US), 09/09/693,336 (UP04US), 09/693,335 (UP05US)

The disclosures of these co-pending applications are incorporated herein by reference.

Various methods, systems and apparatus relating to the present invention are disclosed in the following co-pending applications filed by the applicant or assignee of the present invention on September 15, 2000:

09/663,579 (NPA024US), 09/669,599 (NPA025US), 09/663,701 (NPA047US),
09/663,640 (NPA049US).

The disclosures of these co-pending applications are incorporated herein by reference.

Various methods, systems and apparatus relating to the present invention are disclosed in the following co-pending applications filed by the applicant or assignee of the present invention on June 30, 2000:

09/609,139 (NPA014US), 09/608,970 (NPA015US), 09/609,039 (NPA022US),
09/607,852 (NPA026US), 09/607,656 (NPA038US), 09/609,132 (NPA041US),
09/609,303 (NPA050US), 09/610,095 (NPA051US), 09/609,596 (NPA052US),
09/607,843 (NPA063US), 09/607,605 (NPA065US), 09/608,178 (NPA067US),
09/609,553 (NPA068US), 09/609,233 (NPA069US), 09/609,149 (NPA071US),
09/608,022 (NPA072US), 09/609,232 (NPB003US), 09/607,844 (NPB004US),
09/607,657 (NPB005US), 09/608,920 (NPP019US), 09/607,985 (PEC04US),
09/607,990 (PEC05US), 09/607,196 (PEC06US), 09/606,999 (PEC07US)

The disclosures of these co-pending applications are incorporated herein by reference.

Various methods, systems and apparatus relating to the present invention are disclosed in the following co-pending applications filed by the applicant or assignee of the present invention on 23 May 2000:

09/575,197 (NPA001US), 09/575,195 (NPA002US), 09/575,159 (NPA004US),
09/575,132 (NPA005US), 09/575,123 (NPA006US), 09/575,148 (NPA007US),
09/575,130 (NPA008US), 09/575,165 (NPA009US), 09/575,153 (NPA010US),
09/575,118 (NPA012US), 09/575,131 (NPA016US), 09/575,116 (NPA017US),
09/575,144 (NPA018US), 09/575,139 (NPA019US), 09/575,186 (NPA020US),
09/575,185 (NPA021US), 09/575,191 (NPA030US), 09/575,145 (NPA035US),
09/575,192 (NPA048US), 09/575,181 (NPA075US), 09/575,193 (NPB001US),
09/575,156 (NPB002US), 09/575,183 (NPK002US), 09/575,160 (NPK003US),

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09/575,150 (NPK004US),

09/575,128 (NPM002US),

09/575,179 (NPN001US),

09/575,187 (NPP001US),

09/575,198 (NPP008US),

09/575,146 (NPP018US),

09/575,168 (NPS020US),

09/575,124 (NPT003US),

09/575,162 (NPX003US),

09/575,171 (NPX014US),

09/575,125 (JM52US),

09/575,190 (MJ12US),

09/575,127 (MJ15US),

09/575,147 (MJ58US),

09/575,115 (PAK04US),

09/575112 (PAK07US),

09/575,109 (PEC02US),

09/575,169 (NPK005US),

09/575,180 (NPM003US),

09/575,133 (NPP005US),

09/575,155 (NPP003US),

09/575178 (NPP016US),

09/575,174 (NPS001US),

09/575,154 (NPT001US),

09/575,188 (NPT004US),

09/575,172 (NPX008US),

09/575,161 (NPX016US),

09/575,142 (MJ10US),

09/575,138 (MJ13US),

09/575,158 (MJ34US),

09/575,152 (MJ62US),

09/575,114 (PAK05US),

09/575,111 (PAK08US),

09/575,110 (PEC03US)

09/575,184 (NPM001US),

09/575,149 (NPM004US),

09/575,143 (NPP006US),

09/575,196 (NPP007US),

09/575,164 (NPP017US),

09/575,163 (NPS003US),

09/575,129 (NPT002US),

09/575,189 (NPX001US),

09/575,170 (NPX011US),

09/575,141 (IJ52US),

09/575,140 (MJ11US),

09/575,126 (MJ14US),

09/575,117 (MJ47US),

09/575,176 (MJ63US),

09/575,113 (PAK06US),

09/575,108 (PEC01US),

The disclosures of these co-pending applications are incorporated herein by reference.

Please replace the paragraph on page 7, lines 5 to 6 with the following:

Figure 1 is a schematic of a relationship between a sample printed netpage and its online page description;

Please replace the paragraph on page 9, lines 3 to 13 with the following:

In the preferred embodiment, the invention is configured to work with the netpage networked computer system, a summary of which is given below and a detailed description of which is given in our earlier applications, including in particular applications USSN 09/575,129 (docket no. NPT002US), USSN 09/575,174 (docket no. NPS001US), USSN 09/575,155 (docket no. NPP003US), USSN 09/575,195 (docket no. NPA002US) and USSN 09/575,141 (docket no. IJ52US). It will be appreciated that not every implementation will necessarily embody all or even most of the specific details and extensions described in these

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applications in relation to the basic system. However, the system is described in its most complete form to assist in understanding the context in which the preferred embodiments and aspects of the present invention operate.

Please replace section on page 10, lines 18 to 31 as follows:

As illustrated in Figure 2, the netpage pen 101, a preferred form of which is described in our earlier application USSN 09/575,174 (docket no. NPS001US), works in conjunction with a netpage printer 601, an Internet-connected printing appliance for home, office or mobile use. The pen is wireless and communicates securely with the netpage printer via a short-range radio link 9.

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The netpage printer 601, preferred forms of which are described in our earlier application USSN 09/575,155 (docket no. NPP003US) and our co-filed application USSN 09/693,514 (docket no. NPS024US), is able to deliver, periodically or on demand, personalized newspapers, magazines, catalogs, brochures and other publications, all printed at high quality as interactive netpages. Unlike a personal computer, the netpage printer is an appliance which can be, for example, wall-mounted adjacent to an area where the morning news is first consumed, such as in a user's kitchen, near a breakfast table, or near the household's point of departure for the day. It also comes in tabletop, desktop, portable and miniature versions.

Please replace the paragraph on page 11, lines 10 to 17 as follows:

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The netpage system is made considerably more convenient in the preferred embodiment by being used in conjunction with high-speed microelectromechanical system (MEMS) based inkjet (Memjet™) printers, for example as described in our earlier application USSN 09/575,141 (docket no. US2US). In the preferred form of this technology, relatively high-speed and high-quality printing is made more affordable to consumers. In its preferred form, a netpage publication has the physical characteristics of a traditional newsmagazine, such as a set of letter-size glossy pages printed in full color on both sides, bound together for easy navigation and comfortable handling.

Please replace the paragraph on page 15, lines 1 to 12 as follows:

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Each tag typically contains 16 bits of tag ID, at least 90 bits of region ID, and a number of flag bits. Assuming a maximum tag density of 64 per square inch, a 16-bit tag ID

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supports a region size of up to 1024 square inches. Larger regions can be mapped continuously without increasing the tag ID precision simply by using abutting regions and maps. The distinction between a region ID and a tag ID is mostly one of convenience. For most purposes the concatenation of the two can be considered as a globally unique tag ID. Conversely, it may also be convenient to introduce structure into the tag ID, for example to define the x and y coordinates of the tag. A 90-bit region ID allows 2^{90} ($\sim 10^{27}$ or a thousand trillion trillion) different regions to be uniquely identified. Tags may also contain type information, and a region may be tagged with a mixture of tag types. For example, a region may be tagged with one set of tags encoding x coordinates and another set, interleaved with the first, encoding y coordinates.

Please replace the paragraph on page 15, line 28 to page 16, line 11 as follows:

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One embodiment of the physical representation of the tag, shown in Figure 4a and described in our earlier application USSN 09/575,129 (docket no. NPT002US), includes fixed target structures 15, 16, 17 and variable data areas 18. The fixed target structures allow a sensing device such as the netpage pen to detect the tag and infer its three-dimensional orientation relative to the sensor. The data areas contain representations of the individual bits of the encoded tag data. To maximise its size, each data bit is represented by a radial wedge in the form of an area bounded by two radial lines and two concentric circular arcs. Each wedge has a minimum dimension of 8 dots at 1600 dpi and is designed so that its base (its inner arc), is at least equal to this minimum dimension. The height of the wedge in the radial direction is always equal to the minimum dimension. Each 4-bit data symbol is represented by an array of 2x2 wedges. The fifteen 4-bit data symbols of each of the six codewords are allocated to the four concentric symbol rings 18a to 18d in interleaved fashion. Symbols are allocated alternately in circular progression around the tag. The interleaving is designed to maximise the average spatial distance between any two symbols of the same codeword.

Please replace the paragraph on page 16, line 24 to page 17, line 1 as follows:

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An alternative tag structure more suited to a regular tiling is shown in Figure 5a. The tag 4 is square and has four perspective targets 17. It is similar in structure to tags described by Bennett et al. in US Patent 5,051,736. The tag represents sixty 4-bit Reed-Solomon symbols 47, for a total of 240 bits. The tag represents each one bit as a dot 48, and each zero bit by the

absence of the corresponding dot. The perspective targets are designed to be shared between adjacent tags, as shown in Figures 5b and 5c. Figure 5b shows a square tiling of 16 tags and the corresponding minimum field of view 193, which must span the diagonals of two tags. Figure 5c shows a square tiling of nine tags, containing all one bits for illustration purposes.

Please replace the paragraph on page 19, lines 2 to 12 as follows:

An object-indicating (or function-indicating) tag contains a tag ID which directly identifies a user interface element in the page description associated with the region (or equivalently, a function). All the tags in the zone of the user interface element identify the user interface element, making them all identical and therefore indistinguishable. Object-indicating tags do not, therefore, support the capture of an absolute pen path. They do, however, support the capture of a relative pen path. So long as the position sampling frequency exceeds twice the encountered tag frequency, the displacement from one sampled pen position to the next within a stroke can be unambiguously determined. As an alternative, the netpage:pen 101 can contain a pair or motion-sensing accelerometers, as described in our earlier application USSN 09/575,174 (docket no. NPS001US).

Please amend the paragraph on page 21, lines 16 and 17 as follows:

Our earlier application USSN 09/575,129 (docket no. NPT002US) describes in detail the tagging of the surface of a sphere.

In the Claims:

Please amend claims 1, 6 and 11 as follows:

1. (Amended) A method of enabling a user to designate, in a computer system, at least one geographic location, the method including the steps of:

printing a map of a geographic area, the geographic area including the at least one geographic location, the map including coded data indicative of an identity of the map and of a plurality of reference points of the map, the map of the geographic area and the coded data being printed substantially simultaneously;

receiving, in the computer system, indicating data from a sensing device operated by